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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/678,414	10/02/2000	David W. Carlson	NSC1-H1700 [P04797]	4381

33402 7590 12/04/2002

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EXAMINER

KEBEDE, BROOK

ART UNIT PAPER NUMBER

2823

DATE MAILED: 12/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/678,414

Applicant(s)

CARLSON, DAVID W.

Examiner

Brook Kebede

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-7,9,10,13-17 and 19-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-7,9,10,13-17 and 19-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 1, 2002 has been entered.

Response to Amendment

2. The amendment filed on March 25, 2002 in Paper No. 6 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

Claim 1 recites the limitation "chemically-mechanically polishing the layer of second material and the underlying layer of first material **with slurry** until the layer of second material is all removed from the layer of first material **without changing the slurry** to form the planarized layer of material" in lines 10-12. However, there is not support for, newly added limitation, **without changing the slurry** in the specification as originally filled. Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 1, 2, 5-7, 9, 10 and 13-17 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites the limitation “chemically-mechanically polishing the layer of second material and the underlying layer of first material **with slurry** until the layer of second material is all removed from the layer of first material **without changing the slurry** to form the planarized layer of material” in lines 10-12. However, there is not support for, newly added limitation, **without changing the slurry** in the specification as originally filled. Therefore, the subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 2, 5-7, 9, 10 and 13-17 are also rejected as being dependent of the rejected independent base claim.

5. Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 20 recites the limitation “wherein the layer of first material is formed such that the first lower level lies above the wafer upper level by a value that is equal or greater than the minimum thickness” in lines 2-5. There is no quantitative measurement that indicates the structure has a thickness ranges (i.e., minimum thickness) in the specification. Therefore, the

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limitation was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 5, 13 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation “wherein the layer of first material is formed such that the first lower level lies above the wafer above level by a value that equal or grater than the thickness” in lines 4-5. However, the recited limitation lacks clarity in its scope and meaning. Therefore, the claim is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitation “wherein the layer of first material is formed such that the first lower level lies above the wafer above level by a value that equal or grater than the thickness” in lines 4-5. However, the recited limitation lacks clarity in its scope and meaning. Therefore, the claim is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 recites the limitation “wherein the layer of first material is formed such that the first lower level lies above the wafer upper level by a value that is equal or greater than the minimum thickness” in lines 2-5. However, the recited limitation lacks clarity in its scope and meaning. Therefore, the claim is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Applicant's cooperation is requested in reviewing the claims structure to ensure proper claim construction and to correct any subsequently discovered instances of claim language noncompliance. See *Morton International Inc.*, 28USPQ2d 1190, 1195 (CAFC, 1993).

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1, 2, 6, 7, 14-16 are rejected under 35 U.S.C. 102(b) as being anticipate by Doan et al. (US/5,618,381).

Re claims 1 and 16, Doan et al. disclose a method for forming a planarized layer of material on a processed wafer, the wafer having a top surface, the top surface having a wafer lower level and a wafer upper level that lies above the wafer lower level, the method comprising the steps of: forming a layer of first material (22) on the top surface of the wafer, the layer of first material (22) having a top surface, the top surface of the layer of first material having a first lower level and a first upper level that lies above the first lower level; forming a layer of second material (60) on the top surface of the layer of first material (22); and chemically-mechanically polishing the layer of second material (60) and the underlying layer of first material (22) with a slurry until the layer of second material (60) is all removed from the layer of first material (22) without changing the slurry to form the planarized layer of material; and wherein the layer of

first material makes an electrical contact with a device on the wafer (see Figs. 1-3, 6 and 7 and Col. 2, lines 7-67 through Col. 5, lines 1-34).

Re claim 2, as applied to claim 1 above, Doan et al. disclose all the claimed limitations including the limitation wherein the first lower level lies above the wafer upper level (see Figs. 1-3, 6 and 7).

Re claim 6, as applied to claim 1 above, Doan et al. disclose all the claimed limitations including the limitation the first material as being polysilicon (see Col. 2, lines 26-29).

Re claim 7, as applied to claim 1 above, Doan et al. disclose all the claimed limitations including the limitation the second material is being an oxide (see Col. 4, lines 11-14)..

Re claim 14, as applied to claim 1 above, Doan et al. disclose all the claimed limitations including the limitation the step of doping the layer of first material prior to forming the layer of second material (see Col. 2, lines 26-29).

Re claim 15, as applied to claim 1 above, Doan et al. disclose all the claimed limitations including the limitation wherein the layer of first material is doped polysilicon (see Col. 2, lines 26-29).

11. Claims 1, 2, 5-7, 10, 13-16 and 18-23 rejected under 35 U.S.C. 102(e) as being anticipate by Li et al. (US/6,162,368).

Re claims 1 and 16, Li et al. disclose a method for forming a planarized layer of material on a processed wafer, the wafer having a top surface, the top surface having a wafer lower level and a wafer upper level that lies above the wafer lower level, the method comprising the steps of: forming a layer of first material (16) on the top surface of the wafer (10), the layer of first material (16) having a top surface, the top surface of the layer of first material having a first

lower level and a first upper level that lies above the first lower level; forming a layer of second material (60) on the top surface of the layer of first material (16); and chemically-mechanically polishing the layer of second material (18) and the underlying layer of first material (16) with a slurry until the layer of second material (18) is all removed from the layer of first material (16) without changing the slurry to form the planarized layer of material; and wherein the layer of first material makes an electrical contact with a device on the wafer (see Figs. 2A-2I and Col. 4, line 37 through Col. 6, line 54).

Re claim 2, as applied to claim 1 above, Li et al. disclose all the claimed limitations including the limitation wherein the first lower level lies above the wafer upper level (see Figs. 2A-2I and Col. 4, line 37 through Col. 6, line 54).

Re claim 5, as applied to claim above, Li et al. disclose all the claimed limitations including the limitation wherein the planarized layer of material is formed such that the first lower level lies above the wafer upper level by a value that is equal to or greater than the thickness (see Figs. 2A-2I and Col. 4, line 37 through Col. 6, line 54).

Re claim 6, as applied to claim 1 above, Li et al. disclose all the claimed limitations including the limitation the first material as being polysilicon (see Figs. 2A-2I and Col. 4, line 37 through Col. 6, line 54).

Re claim 7, as applied to claim 1 above, Li et al. disclose all the claimed limitations including the limitation the second material is being an oxide (see Figs. 2A-2I and Col. 4, line 37 through Col. 6, line 54).

Re claim 10 as applied to claim 2 above, Li et al. disclose all the claimed limitations including the limitation step of forming a layer of third material on the planarized layer of material (see Figs. 2A-2I and Col. 4, line 37 through Col. 6, line 54).

Re claim 13, as applied to claim 12 above, Li et al. disclose all the claimed limitations including the limitation wherein the planarized layer of material is formed such that the first lower level lies above the wafer upper level by a value that is equal to or greater than the minimum thickness (see Figs. 2A-2I and Col. 4, line 37 through Col. 6, line 54).

Re claim 14, as applied to claim 1 above, Li et al. disclose all the claimed limitations including the limitation the step of doping the layer of first material prior to forming the layer of second material (see Figs. 2A-2I and Col. 4, line 37 through Col. 6, line 54).

Re claim 15, as applied to claim 1 above, Li et al. disclose all the claimed limitations including the limitation wherein the layer of first material is doped polysilicon (see Figs. 2A-2I and Col. 4, line 37 through Col. 6, line 54).

Re claim 22, Li et al. disclose a method of planarizing a layer of semiconductor material on a processed wafer, the wafer having a top surface, the top surface having a wafer lower level and a wafer upper level that lies above the wafer lower level, the method comprising the steps of: forming a layer of first material on the top surface of the wafer, the layer of first material having a top surface, the top surface of the layer of first material having a first lower level and a first upper level that lies above the first lower level; forming a layer of second material on the top surface of the layer of first material; and chemically-mechanically polishing the layer of second material and the underlying layer of first material until the layer of first material is substantially planar to form a planarized layer of first material, the planarized layer of first material covering

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the wafer upper level of the top surface of the wafer; and forming a layer of third material on the planarized layer of the first material (see Figs. 2A-2I and Col. 4, line 37 through Col. 6, line 54).

Re claim 19, as applied to claim 22 above, Li et al. disclose all the claimed limitations including the limitation wherein the first lower level lies above the wafer upper level (see Figs. 2A-2I and Col. 4, line 37 through Col. 6, line 54).

Re claim 20, as applied to claim 19 above, Li et al. disclose all the claimed limitations including the limitation wherein the planarized layer of first material has a thickness over the wafer upper layer, and wherein the layer of first material is formed such that the first lower level lies above the wafer upper level by a value that is equal to or greater than the minimum thickness (see Figs. 2A-2I and Col. 4, line 37 through Col. 6, line 54).

Re claim 21, as applied to claim 22 above, Li et al. disclose all the claimed limitations including the limitation wherein the first material is doped polysilicon (see Figs. 2A-2I and Col. 4, line 37 through Col. 6, line 54).

Re claim 23, as applied to claim 22 above, Li et al. disclose all the claimed limitations including the limitation wherein the layer of first material makes an electrical contact with a device on the wafer (see Figs. 2A-2I and Col. 4, line 37 through Col. 6, line 54).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al. (US/6,162,368).

Re claim 9, as applied to claim 1 above, Li et al. disclose all the claimed limitations. Regarding the first and second layers of material are chemically mechanically polished with a slurry that has a selectivity that falls within an approximate range of 0.9-1.1:1, the Examiner takes an Official notice since CMP process involves the introduction of a chemical slurry to facilitate higher removal rates and selectivity between films of the semiconductor surface such selectivity depends the composition of the slurry and the material that being removed and it is well-known in the art to determine the selectivity range of 0.9-1.1:1 given Doan et al. disclosure. See *In re Malcolm*, 129 F.2d 529, 54 USPQ 235 (CCPA 1942). See *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970).

Re claim 17, as applied to claim 1 above, Li et al. disclose all the claimed limitations. Although the relative thickness range of the first and second material within the scope of Doan et al. disclosure, Li et al. do not specifically disclose the second material is approximately two to three times as thick as the layer of first material. However, this thickness range can be achieved by one of ordinary skill in the art at desired thickness range by routine experimentation. Generally, differences in concentration or temperature or thickness of the film will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature or particular thickness range is critical. “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” See *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955); *In re Hoeschele*, 406 F.2d 1403, 160 USPQ 809 (CCPA

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1969); *Merck & Co. Inc. v. Biocraft Laboratories Inc.*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989); *In re Kulling*, 897 F.2d 1147, 14 USPQ2d 1056 (Fed. Cir. 1990); and *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997). Furthermore, the specification contains no disclosure of either the critical nature of the claimed thickness range or any unexpected results arising therefrom. Where patentability is said to be based upon particular chosen dimensions or upon another variable recited in a claim, the Applicant must show that the chosen dimensions are critical. See *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d, 1936 (Fed. Cir. 1990).

Response to Arguments

14. Applicant's arguments with respect to claims 19-23 have been considered but are moot in view of the new ground(s) of rejection that was necessitated by the amendment filed on November 01, 2002.

15. Applicant's arguments filed on November 01, 2002, with respect to claims 1, 2, 5, 6, 7, 9, 10, and 13-17 have been fully considered but they are not persuasive.

With respect to the claims objection and rejection, i.e., claims 1, 2, 5-7, 9, 10 and 13 that was set forth under 35 U.S.C. § 132 and 35 U.S.C. § 112 1st Paragraph respectively, applicant's argument was not persuasive to overcome the objection and rejection as that was set forth in Paragraphs 1 and 5 respectively of the Office action of Paper No. 7.

Applicant argues that "*Oxide 330 layer and polysilicon 320 are chemically-mechanically polished with a slurry that ideally has a selectivity of 1:1 (removes oxide layer 330 at the same rate as polysilicon layer 320 (see page 6, lines 25-29.)*" Thus, applicant's specification teaches that layers 330 and 320 are polished with one slurry. If layers 330 and 320 are polished with one

slurry, then layers 330 and 320 must have been polished without changing the slurry. As a result, applicant's specification indirectly teaches that layers 330 and 320 are polished without changing slurry..."

In response to the applicant's argument, the Examiner respectfully submits that such an argument is not commensurate with the scope of the claims, in particular, as stated above. Applicant's presumption that the "oxide layer 330 and polysilicon layer 320 are CMP with a slurry *ideally* has selectivity of 1:1" and therefore layers 330 and 320 "must have been polished without changing the slurry" is erroneous and speculative because the specification does not provide any kind of support for the limitation *without changing the slurry* either directly or indirectly. The etch selectivity is determined by the ratio of the etching rate of oxide layer and the polysilicon layer. In order to have an etch selectivity ratio 1:1, it is not necessary both layers have to be etched by same slurry because it is obvious to prepare a slurry for the oxide layer has different chemical composition than that of the slurry for polysilicon so that both slurries have same etching rate and have a ratio 1:1. Furthermore, there is no evidence in the specification that a single type slurry (i.e., a slurry having same chemical and mechanical composition) has been used to polish both oxide layer 330 and polysilicon layer 320. Therefore, the claims objection and rejection, i.e., claims 1, 2, 5-7, 9, 10 and 13, that was set forth under 35 U.S.C. § 132 and 35 U.S.C. § 112 1st Paragraph respectively is still deemed proper.

Applicant also argues that "the Examiner indicated that applicant's arguments with respect to claims 1, 2, 5-7, 9, 10, 13-23 have been considered but are moot in view of the new ground(s) of rejection. However, the Examiner must address any arguments presented by the applicant which are still relevant to any reference being applied..."

In response to applicant's argument the Examiner respectfully submits that the main part of applicant's argument that was filed on March 25, 2002 in response to the Office action of December 19, 2001 was based on the newly added limitations in the claims, i.e., "polishing the oxide and polysilicon layers *without changing the slurry*." In response to the amendment, the Examiner issued a new matter under 35 U.S.C. § 132 and rejection under 35 U.S.C. § 112 1st Paragraph after it was determined that the limitation has raised a new matter which was not part of the specification and the drawings as originally filled. Since the Examiner has no clue how the limitation can be given patentable weight in light of applicant's preemptive argument without providing support for the amendment, the Examiner decided not to argue based on well founded ground. Furthermore, regarding the claims objection and rejection, i.e., claims 1, 2, 5-7, 9, 10 and 13, that was set forth under 35 U.S.C. § 132 and 35 U.S.C. § 112 1st Paragraph respectively, the argument set forth herein above by the Examiner in response to applicant's arguments is adequate. Corresponding rejection under 35 U.S.C. § 112, first paragraph, the burden shifts to the applicant to rebut the *prima facie* showing. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992) ("The examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability. If that burden is met, the burden of coming forward with evidence or argument shifts to the applicant. . . After evidence or argument is submitted by the applicant in response, patentability is determined on the totality of the record, by a preponderance of evidence with due consideration to persuasiveness of argument.").

In addition, with respect to claims 18-23, the Examiner does not have to response to applicant's preemptive argument since the claims were added as new claims in the amendment

that was filed on March 25, 2002 in Paper No. 6 which the Examiner examined these claims for the first time and issue an Office action that was mailed on June 5, 2002 in Paper No. 7.

With respect to claims rejection of claims 1, 2, 5-7, 10, 13-16 and 18-23 under 35 U.S.C. § 102(e) applicant argued that “it is not possible for a third layer of material to be formed on planarized oxide layer 16 when planarized oxide layer 16 covers the wafer upper level (the top surface of insulative layer 14). Thus, since Li does not teach that a third layer of material formed over polysilicon layer 16 while polysilicon layer 16 covers the top surface of insulative regions 14, claim 22 is not anticipated by Li....”

In response to the applicant's argument, the Examiner respectfully submits that such an argument is not commensurate with the scope of the claims, in particularly, as stated above. Before responding to the subject matter applicant's argument, it is noted that applicant refers both oxide layer and polysilicon layer as layer 16 and this is confusing. In any event, the Examiner would like clarify the matter as follows: as shown in Fig. 2A of Li et al. '368 reference, the oxide layer (i.e., the second layer of material) should refer to as layer 18 and the polysilicon layer (i.e., the first layer of material) should refer to as layer 16. Turning back to applicant's argument, the Examiner respectfully submits that Li et al. '368 disclose all the claimed limitations including the limitation forming of a third layer of material formed over the planarized layer of the first material (see Fig. 2D). However, the applicant just pointed out Fig. 2E, which is one of the embodiment of Li et al.'s '368 reference, and tend to argue that “it is not possible for a third layer of material to be formed on planarized oxide layer 16 when planarized oxide layer 16 covers the wafer upper level (the top surface of insulative layer 14)” whereas applicant choose to ignore Fig. 2D. In addition, the process steps of claims 18-23 of the instant

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applicant follows the drawing of Figs. 3A – 3C of the instant application. Similarly, Li et al. '368 disclose all the claimed limitations, as applied herein above.

Conclusion

16. **THIS OFFICE ACTION IS MADE NON-FINAL.**

Correspondence

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brook Kebede whose telephone number is (703) 306-4511. The examiner can normally be reached on 8-5 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on (703) 306-2794. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Brook Kebede

BK
November 27, 2002

Olik Chaudhuri
Olik Chaudhuri
Supervisory Patent Examiner
Technology Center 2800